Injury Prevention in Hawai‘i: Status and Progress Review

Injury Prevention Advisory Committee

Injury Prevention and Control Program
Hawai‘i Department of Health
1250 Punchbowl Street, Honolulu, Hawai‘i
(808) 586-5940

July, 2003

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Dear Colleagues:

We are pleased to provide you with a report on the progress of injury prevention in Hawaii. The report highlights injury prevention efforts in Hawai'i since 1990 when the Injury Prevention and Control Program was established in the Department of Health as the focal point for coordinating injury efforts throughout the state.

Injuries are a major public health problem throughout the United States, and Hawai'i is no exception. Paralleling national developments, Hawai'i has been a leader in developing a coordinated response to this pervasive challenge.

As you read this report, we ask that you keep four key points in mind:

1. Injuries affect all segments of the community. More awareness of the significance of Hawai'i's injury data is needed.
2. Injury prevention is a new and developing public health field.
3. The Injury Prevention and Control Program has been successful in its primary coordinating role, that is, in mobilizing a network of public and private organizations to collaborate on injury prevention initiatives.
4. The Injury Prevention and Control Program must shore up its infrastructure through a stable and secure base of public health resources in order to develop this important public health field and to sustain the collaborative injury prevention initiatives it has fostered.

For over a decade, many members of our advisory committee have supported and advocated for a coordinated system of injury prevention initiatives. As evidenced in this report, we believe that progress has been made. Today we see important policies and programs in place and a broad network of collaborating individuals, organizations and coalitions throughout the state. Yet our work is not done. While much has been accomplished, a system is yet to be built. We strongly believe that an adequate injury prevention infrastructure must be supported by decision-makers who are critical to ensuring the resources for continued success.

Sincerely,

Bruce McEwan, Ph.D.
Chair, Injury Prevention Advisory Committee

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Executive Summary

Injuries are a major health problem in the United States and Hawai'i today. While they are the leading cause of death for people aged 1- 45, mortality statistics do not convey the full extent of the injury problem. The vast majority of injuries are non-fatal, and in some respects, have greater public health implications. Injuries are costly. Injury-related hospitalizations result in almost $170 million in hospital charges per year in Hawai'i. The financial costs are greater if post-hospital "lifetime" costs as well as indirect costs are added.

In 1984, a task force appointed to determine how Hawai'i could achieve its 1990 health objectives in injury control strongly recommended that Hawai'i establish a state focal point for injury prevention. The efforts of various injury response entities such as police, fire and ocean safety were recognized, but the task force noted that overall coordination was needed to make a difference in prevention. In 1989, the Injury Prevention and Control Program (IPCP) was established within the State Department of Health with a budget of $131,793 in state funds and two (2) full time positions. The program's role would be to coordinate and support government, community and private efforts to reduce injury morbidity and mortality, and to serve as a clearinghouse for injury data and program information. Paralleling national developments in injury prevention, Hawai'i based its program on a scientific approach to injuries and an emphasis on community collaboration and community building.

…both IPAC and IPCP indicated a desire to determine if IPCP as the state focal point had met its intended purpose…

The task force took on an advisory role to IPCP and continues today as the Injury Prevention Advisory Committee (IPAC). Realizing that over a decade has passed since the program began, both IPAC and IPCP indicated a desire to determine if IPCP as the state focal point had met its intended purpose and to chart a direction for injury prevention for the next decade. Over the past year, advisory committee members and program staff examined and discussed the extent of injury prevention activities, accomplishments and impacts, as well as supporting resources and areas of neglect. This paper reflects these findings and their recommendations for the future.

In its first phase of development, IPCP addressed the reduction of injury risk factors in the population through two broad prevention strategies: 1) by building an injury literate Hawai'i and 2) by creating an environment that supports injury prevention practices.

Through a combination of legislative, enforcement, and educational interventions, some successful results are seen today.

- There is a 78% increase in child safety seat use over the past seven (7) years.
- There is a 63% decrease from 1997 to 1998 in the prevalence of children riding in the back of pickup trucks on O'ahu.
- Hawai'i has some of the strongest firearm and traffic safety laws for children in the country.

Specifically in the area of child passenger safety (CPS), we see how these interventions combined with technological advances can be effective in changing a community norm. As a result of state laws, enforcement, CPS checkup events, and information readily available in communities throughout the state, there is greater consumer consciousness of the need to correctly install car seats. More child safety seats are being used, and being used properly, than ever before.

The development of an injury prevention system in Hawai'i has begun with:

- the recognition that injury is a major public health problem in Hawai'i that can be addressed through preventive approaches;
- the use of external cause of injury coding in all hospitals;
- the establishment of a statewide system of child death review;
- coalitions and groups keeping specific injury issues on the public agenda;
- the integration of injury prevention approaches into the work of a number of organizations and agencies;
- a growing and diverse number of stakeholders—government, community, businesses—taking on expanded and proactive roles in injury prevention;
- new injury prevention coordinator positions being created outside of the health department; and
- the emergence of a competent work force and a growing network of professionals and practitioners trained in the science and knowledge of injury prevention.

IPCP has provided the community and decision makers with solid and adequate information to make good decisions.

JUDY SOBIN
EXECUTIVE DIRECTOR
VOLUNTEER LEGAL SERVICES HAWAI'I

Together, IPAC and IPCP must move into the next phase of development with new purpose and focus. Some areas for future direction:

- Scrutinize the data to determine if any shift is needed to neglected injury areas or target groups.
- Put injury data into a format that can be easily understood by the public.
- Pursue emerging cross-cutting prevention issues and strategies and collaborate with overlapping and related fields to injury prevention.
- Introduce the injury perspective into the training curricula of disciplines that participate and contribute to the injury field.
- Conduct an inventory of organizations throughout the state to assess the various interventions being applied to any specific injury area.

While state funds have declined since IPCP's inception in 1989, the program has managed to obtain grants and develop injury areas primarily through federal funds. Today, the ratio of non-state/federal to state funds is 12:1. A stable funding base for core staff is essential if IPCP is to maintain its momentum in developing an injury prevention system in Hawai'i.

Next steps recommended are: 1) develop a state strategic plan, 2) strengthen IPAC to be proactive in its new mission for the next phase of development, reorganizing its structure and composition, and 3) strengthen and stabilize IPCP as the focal point for the state in injury prevention.

Injury Prevention in Hawai‘i: Status and Progress Review

Introduction

More than a decade ago, the Institute of Medicine and the National Research Council (NRC) laid the foundation for the field of injury prevention and treatment as distinct spheres of specialization within public health and clinical medicine. The reports of these earlier committees——Injury in America (1985) and Injury Control (1988)—are viewed as the starting point for much of the nation's renewed interest and developing work in the injury prevention field.

The reports called for a national plan for injury control and for national leadership of federal injury control efforts to be focused at the Centers for Disease Control (CDC). Placement at CDC was recommended because of its research rather than regulatory emphasis, its strong relationships with state health departments, and its capacity to disseminate new information and technology (National Research Council, 1985).

As a result, Congress established a new pilot program for injury control in CDC. After three years of operation supported by funding from the Department of Transportation, the National Research Council reviewed the program's progress and recommended that it be made permanent (NRC, 1988). Congress responded with the Injury Control Act of 1990 authorizing the program and paving the way for direct appropriations. In 1992, CDC elevated the Division of Injury Epidemiology and Control to the National Center for Injury Prevention and Control (NCIPC). The mission of NCIPC is "to provide leadership in preventing and controlling injuries, i.e., reducing the incidence, severity, and adverse outcomes of injury (NCIPC, 1996). This mission is met through a spectrum of activities in research, surveillance, implementation and evaluation of programs, and public education.

…an overall coordinating entity was needed as a first step toward developing injury data…

Meanwhile Hawai‘i initiated parallel efforts similar to the national injury prevention movement that was based on a scientific approach to injuries. As early as 1984, a Governor's Conference on Health Promotion and Disease Prevention convened study groups that examined 15 public health areas for the purpose of setting Hawai‘i health objectives that would be in line with national health objectives for 1990.

These study groups reconvened in 1986 as task forces to make recommendations on how Hawai‘i could achieve the objectives in each public health area. The Task Force on Accident Prevention and Injury Control, noted that despite the singular noteworthy efforts of different disciplines and agencies, e.g., police, fire, ocean safety, an overall coordinating entity was needed as a first step toward developing injury data, implementing the 1990 injury prevention objectives, and consequently, reducing mortality and morbidity due to injuries in Hawai‘i.

The Task Force came up with a strong recommendation.

Hawai‘i must establish a state focal point for injury prevention.

Such a unit, responsible for injury prevention and control would be located in the State Department of Health with the capacity to address all injury types in all phases of the injury spectrum. The major functions of the unit would include:

- planning/system development;
- coordination;
- epidemiological surveillance/monitoring;
- advocacy, especially regarding legislation;
- public information; and
- quality assurance.

Essentially, this state-level office would be the focal point for developing the field of injury prevention in Hawai‘i. Initial funding would need to be provided for staffing and technical support in the form of a Director and a Secretary.

As a result of their groundwork, the Task Force advocated successfully for the creation of the Injury Prevention and Control Program (IPCP) to serve as a **central focus** for injury prevention in the state. IPCP's role would be to **coordinate and support** government, community and private efforts to reduce injury morbidity and mortality and to serve as a **clearinghouse** for injury data and program information.

The Task Force then took on an advisory role to the program and continues today as the Injury Prevention Advisory Committee (IPAC).

It has been 13 years since the Injury Prevention and Control Program was established in 1989 as a state-level program in the Department of Health. Both IPAC and IPCP believe it is time to reflect on where we are today and what we have achieved as we begin to chart the direction of injury prevention for the next decade.

Has IPCP lived up to the expectations upon which it was founded? What has been its impact on injuries in Hawai‘i and on Hawai‘i's prevention efforts? What have we accomplished? Not accomplished? What remains to be done? Where do we go from here? Is there a new role for injury prevention today? And finally, what resources do we need to move forward?

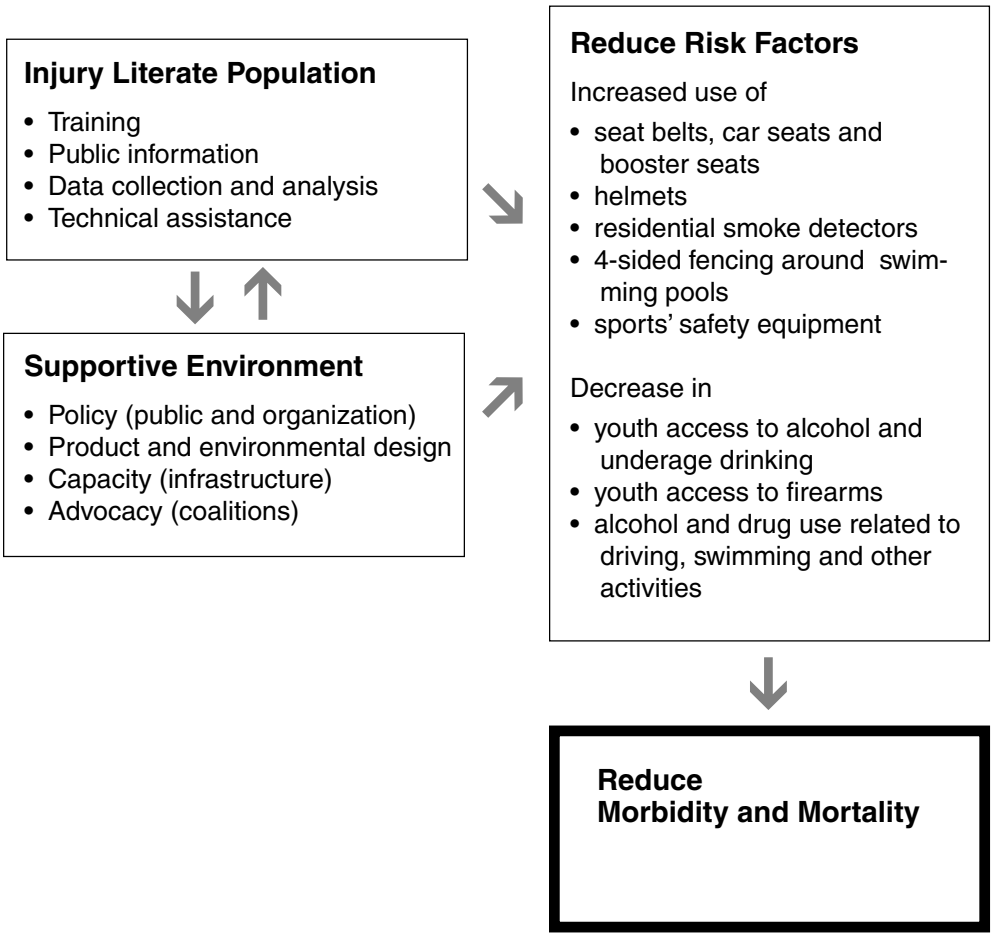
These questions were at the heart of a year-long dialogue among members of the Injury Prevention Advisory Committee and staff of the Injury Prevention Control Program. Learning from our past as we face the future, this paper reflects that dialogue as we call for collective action for the next phase of work—building and sustaining the momentum of injury prevention in Hawai‘i.

Mission (1989 – 2001):
The Injury Prevention Advisory Committee seeks to increase community understanding of injury in order to reduce the number of injuries, injury-related deaths, and their immediate and long term effects in Hawai'i.

The following framework highlights the public health approach taken to meet IPAC's founding mission. The reduction of injury risk factors in the population is addressed through two major strategies:
1) by building an injury literate Hawai'i and
2) by creating an environment that supports injury prevention practices.

[IPCP has] made for a coordinated effort with better communication and sharing of information across fields of interest and expertise.

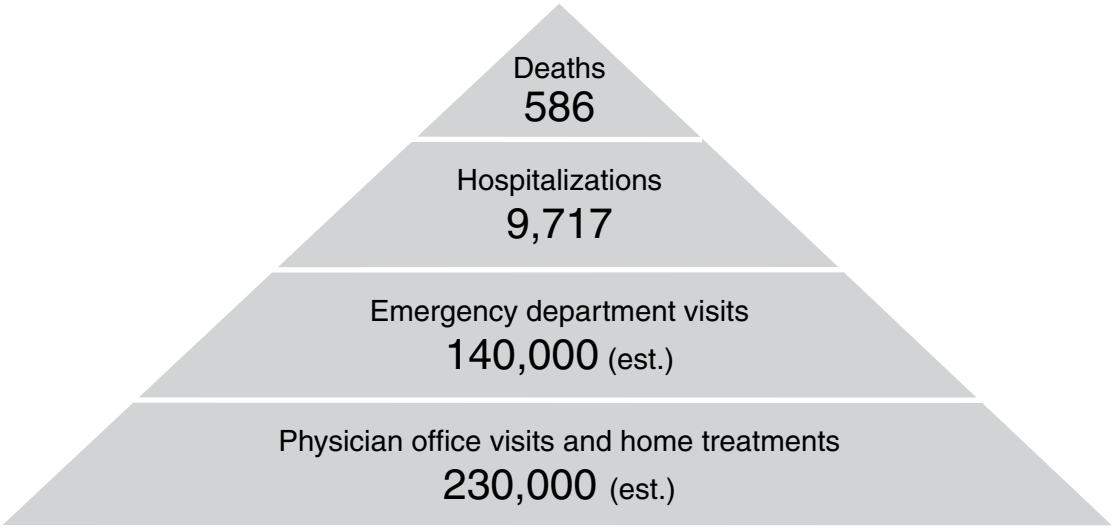
NANCY MARKER
EDUCATIONAL SPECIALIST
U.H. CENTER FOR YOUTH RESEARCH
SOCIAL SCIENCE RESEARCH INSTITUTE



Injuries are a major public health problem in the United States and Hawai‘i today. Injuries are the leading cause of death for people aged 1 to 45, accounting for nearly as many deaths as all the other diseases combined, including heart disease, stroke and cancer. Among all ages, injuries are the fourth leading cause of death and disability. Unlike heart disease and cancer, which primarily affect the old, injury deaths affect people of all ages, especially the young. As a result, injuries result in more productive years of life lost than any other cause.

Mortality statistics do not convey the full extent of the injury problem, however. Fatal injuries represent less than 0.3% of all injuries requiring medical attention. Although fatal injuries are the most severe, the vast majority of injuries are non-fatal, and in some respects, these have much greater public health implications. The figure below shows the estimated number of injuries per year at various levels of severity.

Average number of injuries per year in Hawaii



Mortality statistics do not convey the full extent of the injury problem, however.

On an average day in Hawai‘i, 1 or 2 people die from an injury, 27 are hospitalized, and an estimated 380 more are seen in emergency departments, including about 15% who are transported by ambulance. *Injuries, however, are preventable, and without exception, preventing injuries costs less than treating them.*

Injuries are costly. Apart from the pain and suffering endured by the victims and their families, injury-related hospitalizations result in almost $170 million in hospital charges per year in Hawaii. This is an underestimate of the actual cost of injury-related hospitalizations, however, as it does not include physician charges.

The financial cost of injury is considerably greater if one includes post-hospital, "lifetime" costs; costs derived from rehabilitation, nursing home care, insurance administrative costs for medical claims compensation, and other services. Injuries sustained in 1990 alone were recently estimated to cost nearly $6 billion in direct lifetime medical care. That figure is doubled to $12 billion if indirect costs are included for issues such as the value of lost wages, household work, fringe benefits, pain, suffering, and lost quality of life.

The leading causes of fatal and non-fatal (from hospital and EMS records) injuries in the state are listed in the table below. Note that the rank of the cause differs somewhat, depending on the general severity of the injury. For example, falls caused proportionally more of the injuries requiring hospitalizations and ambulances, but constituted less of the fatal injuries. In contrast, drowning was only a leading cause among the fatal injuries. Car crashes and assaults were important causes of injuries at all levels. Suicides accounted for nearly one-quarter of fatal injuries, making this the single leading cause. Suicides and suicide attempts also accounted for about 16% of injury-related hospitalizations.

Partnering with KIPC and IPCP provided the opportunity for shared resources and man-power which would not have otherwise been possible.Child passenger safety legislation, information and education on injury prevention, integration of child seat check ups with programs such as WIC, American Ambulance, and fire stations were possible through strong partnerships.

DELY SASAKI
PROGRAM MANAGER
FAMILY HEALTH SERVICES, KAUAI DISTRICT HEALTH OFFICE

Leading Causes of Injury Deaths in Hawai'i by the three major injury data sources

Rank	Death certificates			Hospital admission records			EMS Ambulance reports		
	Cause	*%*	*No.*[1]	*Cause*	*%*	*No.*[2]	*Cause*	*%*	*No.*[3]
1	Suicide	24	136	Falls	33	3224	Car occupant	40	7695
2	Car occupant	13	77	Suicide	16	1516	Falls	19	3664
3	Falls	11	65	Car occupant	15	1479	Assault	19	3634
4	Drowning	10	60	Striking injury[4]	5	449	Pedestrian	5	936
5	Homicide	7	39	Assault	4	434	Motorcyclist	4	787

1. Average annual number of deaths from 1996-2000 death certificates.
2. Average annual number of injury-related hospitalizations, from 1997-2001 records. Since only 56% of these records contain external cause codes, these estimates are extrapolated from the known number of injury-related hospitalizations. Includes cause-specific estimates for admissions at Queen's, using Queen's trauma registry data.
3. Average annual number of ambulance-attended injuries, from 1995-98 records. Since Oahu EMS records contain more detailed injury information, state totals were estimated using the Oahu distribution of injuries.
4. Most of these (89%) were from being struck by objects or persons, including 33% that occurred during sports.

Attributes of Major Injury Data Sources in Hawai‘i

	Death certificates	Hospital admission records	EMS ambulance reports
Geographic coverage	All islands	All islands	Complete for Oahu, more limited for N.I.
Available data (all updated annually)	1984-2000	1996-2001	1995-1998
Volume	Low ~40/year	Medium ~1,600/year (~800 E-coded)	High ~2,700/year
External cause coding for injury	Complete	Incomplete[1]	None[2]
Unique elements	Detailed demographics	Cost (e.g., hospital charge), Severity	Census tract of incident, limited

1. 50% of total number of injuries, none for Queen's or Tripler (69% for remaining hospitals)

2. 18 injury categories for Oahu, only 4 for N.I.

Other injury data sources:

Trauma Registry data (Queen's Medical Center only)

Fatal Analysis Reporting System (FARS)

Uniform Crime Reports (UCR)

Records of the Medical Examiner's Office of Honolulu County

Reducing Mortality and Morbidity

What has been the impact of Hawaii's prevention efforts on injuries in Hawaii? This section addresses a key question posed by the Injury Prevention Advisory Committee by examining different levels of impact.

In determining the effects of injury prevention activity in the general population to morbidity and mortality, the following points must be considered.

Since its inception, the IPCP has helped focus attention on the area of injury. We have gotten away from using the term "accident" and have a more public health oriented approach to identify and quantify causes of child injury. IPCP, by establishing KIPC, has also helped galvanize interest amongst the many agencies and organizations interested in child health and welfare.

KENN SARUWATARI
PODIATRICIAN
IMMEDIATE PAST
PRESIDENT
HAWAII CHAPTER,
AMERICAN ACADEMY
OF PEDIATRICS

Injuries are influenced by many factors. Successful prevention strategies include numerous variables that would affect a specific injury problem. For example, in the leading category of injury death, motor-vehicle related, deaths have declined substantially in the U.S. over the past 25 years. A reduction in death and injury rates for motor vehicle occupants depend on a combination of the following factors: access to, correct installation and use of safety devices such as seat belts and car seats; laws and enforcement of laws mandating use; and an educated public. In addition, specific variables examined in motor vehicle collisions are driving conditions, speeding, and driving under the influence of alcohol or other substances.

Injuries are complex multi-faceted problems requiring a multi-disciplinary approach. Prevention and remediation of these problems involve a wide variety of institutions, agencies and organizations as part of the solution. Specific interventions must be weighed against the effectiveness of other efforts.

The injury prevention field itself views a comprehensive approach based on multi-pronged strategies as critical to success. An effective public health response is one that recognizes its own limitations and understands that it has a contributory role in collaboration with other agencies. The contributions of all must be examined in assessing impact.

While we can set goals and objectives that would lead to certain health status outcomes, linking program impact to mortality and morbidity data is highly difficult and perhaps, unrealistic. There is a basic measurement problem. Due to our relatively small state population size, we have small numbers for mortality in most injury categories making trends difficult to accurately identify, much less show statistically significant changes.
In reality, except for motor vehicle occupant deaths, Hawai'i fatalities in the leading injury areas have generally fluctuated each year over the past 10 years without definite improvements.

Despite limitations in using mortality data to measure impact, we can examine morbidity data such as hospital admissions and emergency department visits where the numbers of cases are larger. Hospital admissions data has become available in recent years but is limited because external cause of injury codes had not been routinely used by two of Hawaii's major hospitals. However, due to the efforts of

IPCP, these hospitals began to use cause of injury codes on a routine basis in their hospital admissions records in November 2002. This step will add substantially to our knowledge of injury morbidity data.

In addition, injury-related data from hospital emergency departments (ED) should be available in 2003. This data will help to complete the picture of non-fatal injuries in Hawai'i, and aid in the interpretation of data on hospital admissions. For example, while there has been a general decrease in the annual number of patients admitted for bicycle crashes over the 1998-2001 period, it is not clear if this reflects a true decrease in injuries or is simply the result of more stringent admissions criteria among hospitals over that period. The newly acquired ED data can help address this possibility. (It is important to note that all non-fatal injury data sources will be limited by the extent and quality of the external cause coding. And recent efforts to improve in these regards will not show rewards for at least one or two years.)

Injury Prevention Strategies

We [Hawaii Bicycling League] developed a solid viewpoint on children's helmet legislation because of the lead taken by IPCP…the cycling social conscience began to follow.

EVE DECOURSEY
PLANNER
TRAFFIC ENGINEERING DIVISION, CITY & COUNTY OF HONOLULU
PAST EXECUTIVE DIRECTOR, HAWAII BICYCLING LEAGUE

The renewed field of injury prevention of the mid-'80s is based on three general types of intervention strategies:

- ***Persuade*** persons at risk of injury to alter their behavior for increased self-protection, e.g., to use seatbelts or install smoke detectors. This strategy is based on **education or behavior change interventions**.

- ***Require*** individual behavior change by law or administrative rule, e.g., by laws requiring seatbelt use or requiring the installation of smoke detector in all new buildings. **Legislation and enforcement interventions** that include regulations and organizational policies characterize this strategy.

- ***Provide automatic protection*** by product and environmental design, e.g., by the installation of airbags that automatically encompass occupants of motor vehicles or build-in sprinkler systems that automatically extinguish fires. This strategy relies on **engineering or technological interventions**, that is, changes in the design of products or of the physical environment. (Injury in America, 1985)

While each of these strategies has a role in any comprehensive injury prevention program, the latter two strategies—legislative/regulatory and engineering/technological interventions—are preferred whenever feasible. Automatic or passive measures that don't require action on the part of the individual to be protected, e.g., air bags and child-resistant medicine bottle caps, are more likely to be effective in reaching and protecting the greatest number of persons. However, educational strategies have an important role in combination with the other two strategies. Education is often needed for public acceptance of legislation, as a means of increasing compliance with the law, or to address misuse of technology (e.g., car seats). In addition, the education of decision makers, opinion leaders, and the public is often needed to enact legislation or to change organizational policies and practices.

Although it is difficult to claim that any sole injury prevention intervention has direct impact on decreased mortality or morbidity, we know that certain measures do work. Safety devices, laws and administrative rules can make the overall environment less conducive to people becoming injured. IPCP focused its initiatives over the past seven years on the correct usage of child passenger restraints through a combination of laws passed, car seat checkups held in communities throughout the state, public and professional education and training, and citizen reporting. As a result, in 2002, more child car seats were being used, and being used properly, than ever before. We observe greater consumer consciousness of the need to correctly install car seats. The following illustrates this comprehensive approach.

I was a first-time mom of an infant back in 1995 when there was not a lot of information available to parents on the correct installation and use of car seats. Through IPCP, I was able to learn about the correct use and installation of car seats through their certified technician training, community checkups, hotline and website. When my second child was born in 1999, I was able to see firsthand the incredible gains made in community awareness.

LIANE KAM
EXECUTIVE DIRECTOR
READ TO ME INTERNATIONAL FOUNDATION

IPCP's and the Keiki Injury Prevention Coalition's (KIPC's) child safety seat interventions are an example of multi-injury prevention strategies being interwoven. To enhance a child restraint *law* already in place, a *community education* initiative targeting non-compliant parents (i.e., the Keiki Car Seat Hotline) was conducted to increase car seat use. In addition, *organizational policies* in the public and private sectors were amended to provide car seat *checkups* and *education* in the community on a regular basis. These efforts were further reinforced by passing *legislation* that requires the courts to *educate and train* violators of the child safety seat law and increasing police *enforcement* of the law. These car seat strategies are in accordance with the National Highway Traffic Safety Administration's recommendations on "best practices" for a safe community. Essential elements include enforcement, clinics or workshops on correct use and coalitions promoting child safety seat issues.

Reducing Risk Factors

So what impact has been made in the area of injury prevention? While morbidity and mortality reduction has yet to be observed, risk factors such as non-use of car seats, seat belts and helmets, are surrogate measures that can be used to assess impact. Have we made any gains in reducing these risk factors of injury morbidity and mortality?

Research has shown that the use of safety devices such as seat belts, car seats, bicycle helmets and motorcycle helmets, increases when laws are passed and enforced. The following outcomes show the impact on child passenger safety in Hawai'i by IPCP's advocacy for laws that would increase the use of safety devices to reduce the risk of serious injury and death:

- There has been a 78% increase in child safety seat use over the past seven years (from 1995 when IPCP launched initiatives in child passenger safety to 2002). (Every dollar spent on a child safety seat saves $32 in direct medical care alone. When used correctly, child safety seats reduce the estimated fatality risk by 71% and the risk of serious injury by 68%.)

- There has been a 63% decrease in the prevalence of children riding in the back of pickup trucks on Oahu (from 1997 before the law was passed to 1998). The decrease has continued even further according to recent observational studies. (Studies have found that in crashes involving fatalities, truck bed passengers were eight times more likely to die than were occupants in the cab who were restrained.)

A law was passed in 2000 that took effect in 2001 requiring helmet use for children under the age of 16. Although not yet measured, this law should result in increased use of helmets in this age group, and perhaps in others as well, through increased awareness.

Increasing Injury Literacy and Creating a Safe and Supportive Environment

Visible gains can be seen in certain conditions that contribute to reducing the risk factors of injury morbidity and mortality. According to the framework described at the beginning of this paper, these conditions are: 1) an injury literate population where residents are knowledgeable about preventing injuries and 2) an environment that supports safety. IPCP has focused its efforts in these areas with the following impacts.

- The term "injury" rather than "accident" is used today more than ever before. Policymakers, police, fire, lifeguards and the local media use the word "injury" more routinely. Agencies such as the Honolulu Police Department, the state Department of Transportation and the City & County Ocean Safety Division have adopted the term, building a prevention mindset into the organizational culture.
  ("Accident" implies random events and bad luck, while "injury" refers to the health outcome and implies predictability in the epidemiological sense, therefore being amenable to prevention. - Reducing the Burden of Injury, National Research Council 1999)

- Through training and participation in IPAC, KIPC and other injury prevention coalitions, hundreds of people throughout the state have become injury literate, learning the language, perspective, methodology and approach of injury prevention.

- Every family in Hawai'i has access to free car occupant protection information and quality child restraint installation/education services provided by 160 trained child passenger safety technicians. As a result of child passenger safety checkups in communities throughout the state, there is greater consumer consciousness of the need to correctly install car seats. More child safety seats are being used, and being used properly, than ever before.

- Standard international safety signs are posted at beaches throughout the state. Passed in 2002, Act 190 recognized that signage is an essential part of government's "duty to warn."

- School and community playgrounds are being rebuilt for safety, often with community participation and education as part of the process.

- Inroads have been made toward a statewide safety infrastructure. Hawai'i has some of the strongest firearm and traffic safety laws for children in the country. These examples demonstrate legislative advocacy successes based on public health epidemiology and a prevention rationale. IPCP has been a critical resource in providing injury prevention expertise in these policy discussions.

Finally, a discussion on impact cannot be concluded without acknowledging the extensive community collaboration that must be forged to effect change. An underlying assumption of IPAC is that many individuals and organizations must be involved and must work together to address injury prevention problems in our community. Building a community base for injury prevention is an essential component for success that cannot be directly measured for direct impact. Due to IPCP's efforts, coalitions and collaborative partnerships have been formed across all sectors for specific injury areas. These include government and regulatory agencies, educational institutions, private business and community organizations. The following are some examples of these partnerships.

We have initiated programs for our community that would not have started without the networking done through the IPCP. We started a 1 1/2-mile walking trail, installed playground equipment in three schools, installed a volleyball court at a county park, an easy access ramp and diving board at our local pool and provided swimming classes and transportation for 3rd and 4th graders, and initiated a series of after school programs that encourage active participation in healthy alternatives in a safe environment.

DOUG CONNORS
TREASURER
LAPAHOEHOE TRAIN MUSEUM

Motor Vehicle Occupant Protection

State Department of Transportation; County Police Departments; Kapiolani Medical Center for Women and Children; Toys-R-Us; Keiki Injury Prevention Coalition (KIPC); American Medical Response, Kauai

Bicycle Safety

Honolulu Police Department; HMSA; Hawaii Bicycling League; U.S. Consumer Product Safety Commission, Hawaii Unit; Pacific Sports Care

Pool and Ocean Safety

City and County of Honolulu Ocean Safety and Lifeguard Services Division; Hawaii Lifeguard Association; Hawaii, Maui and Kaui County Lifeguard Services; YMCA

Alcohol-Related Injury Prevention

Alcohol and Drug Abuse Division, DOH; Teens for Safer Communities Hawaii, DOE; and County Liquor Commissions

Playground Safety

Honowai School and PTSA; HMSA; Coast Recreation Hawaii; Waipahu Community Foundation; DOE; West Oahu Reality; Department of Parks and Recreation, City and County of Honolulu; Hickum Air Force Base; KIPC.

Fall Prevention

Home Safety Monitoring Program, Hawaii Island Adult Care, Inc.; Public Health Nursing Branch, DOH

Suicide Prevention

Waianae and Nanakuli High Schools, DOE; Maternal and Child Health Branch, DOH; Alaska Department of Health and Human Services; Department of Psychiatry, John A. Burns School of Medicine; Mental Health Division, DOH; Survivors

Firearm Injury Prevention

HPD; Office of the Attorney General; Office of the Prosecutor, City and County of Honolulu; The League of Women Voters of Honolulu; Hawaii Council of Churches; Center for Youth Research, UH; Survivors

Violence Prevention

United Approach to Violence Prevention Consortium (now part of The Awareness Foundation, Inc.); Prevent Child Abuse Hawaii; Volunteer Legal Services of Hawaii; Hawaii Commission on the Status of Women; Chronic Disease Management and Control Branch (formerly the Health Promotion and Education Branch)

The following benchmarks highlight developmental milestones representing significant activity that has moved injury prevention forward over the last 13 years.

Benchmarks: Increasing Injury Literacy

Training was systematically provided to increase the knowledge and skills of a cadre of professionals, practitioners and community activists in injury prevention, fostering collaborations and partnerships.

IPCP has provided the Department of Transportation with a valuable partner in the child passenger safety seat program.

LEE TAKATA
INFORMATION SPECIALIST
SAFE COMMUNITY OFFICE
STATE DEPARTMENT OF TRANSPORTATION

- In an inaugural two-day "Hawai'i Injury Prevention Workshop" conducted by IPCP, 80 front-line practitioners throughout the state learned about the field and language of injury prevention forming a core advocacy network (1991).

- Subsequent trainings strengthened and expanded this network:
  A two-day statewide "Hawai'i Injury Prevention Emergency Medical Services Workshop" tailored to EMS providers, and also attended by coalition members and practitioners, trained 60 (1999).
  Three statewide injury prevention conferences trained 350 health and safety professionals and community members in the field of injury prevention (First and Second Annual Hawai'i Injury Prevention Conferences, 1991 and 1992, "Injury Prevention – Can We Make a Difference?" 2002).

- A core of 22 certified instructors were trained and developed to offer the National Highway Traffic Safety Administration's 32-hour standardized child passenger safety course within each county. As a result, Hawai'i now has 260 people trained as certified child car passenger safety technicians throughout the state. And a refresher course for these certified technicians is currently offered in each county.

- Two instructors and one child passenger safety technician were trained nationally to conduct local workshops on child passenger safety for children with special needs. In 2001, they were able to conduct a workshop for people who work with children with special health needs as well as develop a child passenger safety inspection station for children with special health needs.

- Medical coders from all major hospitals in the state were specially trained to code discharge records for injury-related hospital admissions and emergency department visits (2002).

Public Education conveyed the magnitude of the injury problem in Hawai'i. IPCP and its partners produced and distributed the following publications on the morbidity and mortality of injury. And Hawai'i's two major dailies featured information from these publications.

- Injury in Hawai‘i series that for the first time identified and established baseline data on the leading causes of non-fatal and fatal injuries in Hawai‘i for 1989-1990.
- An Overview of Injury Hospitalizations and Deaths in Hawai‘i (1994)
- The Causes and Consequences of Injury in Hawai‘i (1994)
- Injury Hospitalizations and Deaths in Hawai‘i: Ethnic Diversity (1994)
- Spanning the Ages: The Magnitude of Injury Hospitalizations and Deaths in Hawai‘i (1994).
- The Geography of Injury Hospitalizations and Deaths in Hawai‘i (1994).
- What's Hurting Our Children: Childhood Injury Hospitalizations in Hawai‘i, 1989-1990 (1995)
- The Costs of Injury in Hawai‘i and the Benefits of Prevention (1998)
- What's Killing Our Children: Childhood Injury Mortality in Hawai‘i, 1987-1992 (1994).
- Firearm-Related Morbidity and Mortality on Oahu, 1995-1997 (2001).
- Protecting Our Children: Strategies for Injury Prevention - Action Plan 2002
- Water Safety Surveillance Project: 1993
- Water Safety Surveillance Project: 1994-1995

To reinforce good prevention practices, community responsibility, and awareness of new laws, IPCP and its partners launched media campaigns on child passenger safety, pedestrian safety and home pool safety. Five television spots were produced for these campaigns.

IPCP has furthered the knowledge base of injury prevention in Hawai‘i through conducting studies (or original research), and evaluating policies and interventions. Examples include:

- Morbidity, Mortality and Cost Of Non-Use Of Motorcycle Helmets Report (Produced in 1993 in response to a legislative resolution)
- Evaluation of Hawai‘i's pickup truck law (1998)
- Analysis of rescues and injuries on life-guarded beaches on Oahu (1998 – 1999)
- Keiki Car Seat Hotline Evaluation (2000)
- Evaluation of Hawai‘i law requiring medical personnel in a health care facility to report elevated blood alcohol levels of injured drivers to police (preliminary results 2001).
- Honowai - Creating a Community-Built Playground (2001)
- Evaluation of the child passenger safety class required of violators of Hawai‘i's child passenger restraint law (2002).
- Study of medical and toxicological factors related to drownings in Honolulu County (2002)
- Analysis of ethnic-specific injury mortality among children in Hawai‘i (2002)

Data Collection, Analysis and Technical Assistance provided on injury-specific topics have educated providers and consumers to the injury situation in Hawai‘i. IPCP has become a clearinghouse for data and injury information by:

- mailing out injury prevention materials in response to more than 200 requests yearly for information from the public, practitioners and policymakers;

- completing more than 50 requests from practitioners yearly for data and/or analyses;
- establishing an injury-specific multi-media library of local and national studies, reports, and articles;
- publishing an injury prevention directory (1994 and 1996); and
- serving as a reliable and credible source of injury information, responding to requests from other public health programs, the press, legislators and the community.

Benchmarks: Creating Supportive Environments

Coalitions were organized to advocate for and support injury prevention efforts.

- Keiki Injury Prevention Coalition/SAFE KIDS Hawai'i (KIPC)
- Childhood injury prevention coalitions on Kaua'i and Hawai'i
- Violence Prevention Consortium (integrated now into the Awareness
- Foundation)
- Firearms Control Coalition (no longer active)
- Hawai'i Safety Helmet Coalition (no longer active)

IPCP has provided the opportunity for HMSA to support through funding or staff the initiatives that IPCP has coordinated, i.e., the playground efforts. These help strengthen our mission of supporting the community.

MYRA WILLIAMS
ASSISTANT VICE PRESIDENT, CARE MANAGEMENT
HAWAII MEDICAL

Policies were successfully enacted or instituted.

- Traffic safety laws to protect our children were passed:
- Prohibiting children under 12 from riding in the back of a pickup truck (Act 105, 1997).
- Requiring violators of Hawai'i's child restraint law to attend a 4-hour child passenger safety class, the first of its kind in the nation and a model strategy for other states (Act 81, 1998).
- Increasing the age in which children are required to be in a car seat to age 3 (Act 56, 1999).
- Requiring minors under 18 years of age to use a seat belt in the back seat of a car (Act 294, 2000).
- Requiring bicyclists under 16 years of age to wear a bicycle helmet (Act 255, 2000).

- Firearm safety laws to protect Hawai'i residents were passed:
- Banning the sale, possession and use of assault pistols, and limiting magazine sizes to less than 10 rounds (Act 286, 1992).
- Requiring owners to ensure that their guns are secured against possession by minors and makes them liable for the misuse of their guns (Act 288, 1992).
- Providing for confiscation of guns, ammo and permits for anyone arrested for a crime of violence, or who has a restraining order or temporary restraining order against them (Act 215, 1993 and Act 204, 1994).
- Requiring registration of all long guns (handgun registration already required) (Act 204, 1994).
- Permitting police to confiscate firearms at a domestic violence scene when a family or household member has been threatened with a firearm, or if a firearm is found at the scene (Act 201, 1996).

- Requiring persons disqualified from ownership or denied a firearm permit to turn over firearms already in their possession to the police, or to sell it to a licensed dealer or qualified person (Act 127, 2000).
- Establishing a domestic violence prevention special fund derived from certified copies of birth, marriage and death certificates issued by the Department of Health. A portion of the monies was set aside to start the Integrated Violence Prevention Curriculum Initiative (Act 217, 1997).

[IPCP has] wholeheartedly supported the Child Safety Seat Program and validated the need to people who did not see this as a priority… 2

PAM COURTNEY
LINE MANAGER
CLINICAL SERVICES DEPARTMENT
KAPIOLANI MEDICAL CENTER FOR WOMEN AND CHILDREN

A prototype for ***environmental change*** was successfully developed and demonstrated.

- IPCP and KIPC played a key role together in building a new playground at Honowai park (completed in 2001), ensuring up-to-date safety features and design. This community-build project served as a model of collaboration for building other playgrounds and similar projects within the physical environment of a community.

The expertise and track record established through these efforts served as an impetus for private sector funding for playground safety in the state and for a grant from the Healthy Hawai'i Initiative to develop "walkable communities" with a specific focus on creating "Safe Routes to School."

The Department of Health established IPCP to provide a focal point for injury prevention and to ensure a systems approach to reducing injury morbidity and mortality in the State.

IPCP is responsible for coordinating, planning, conducting and evaluating injury prevention programs; developing and advocating for sound public policy; collecting, analyzing and disseminating injury data, providing technical assistance and training. IPCP's functions and community-based emphasis are in accordance with the recommendations of the Institute of Medicine and the State and Territorial Injury Prevention Directors' Association (STIPDA) for core components of a comprehensive injury prevention program in state health departments.

…community coalitions have become a powerful strategy…

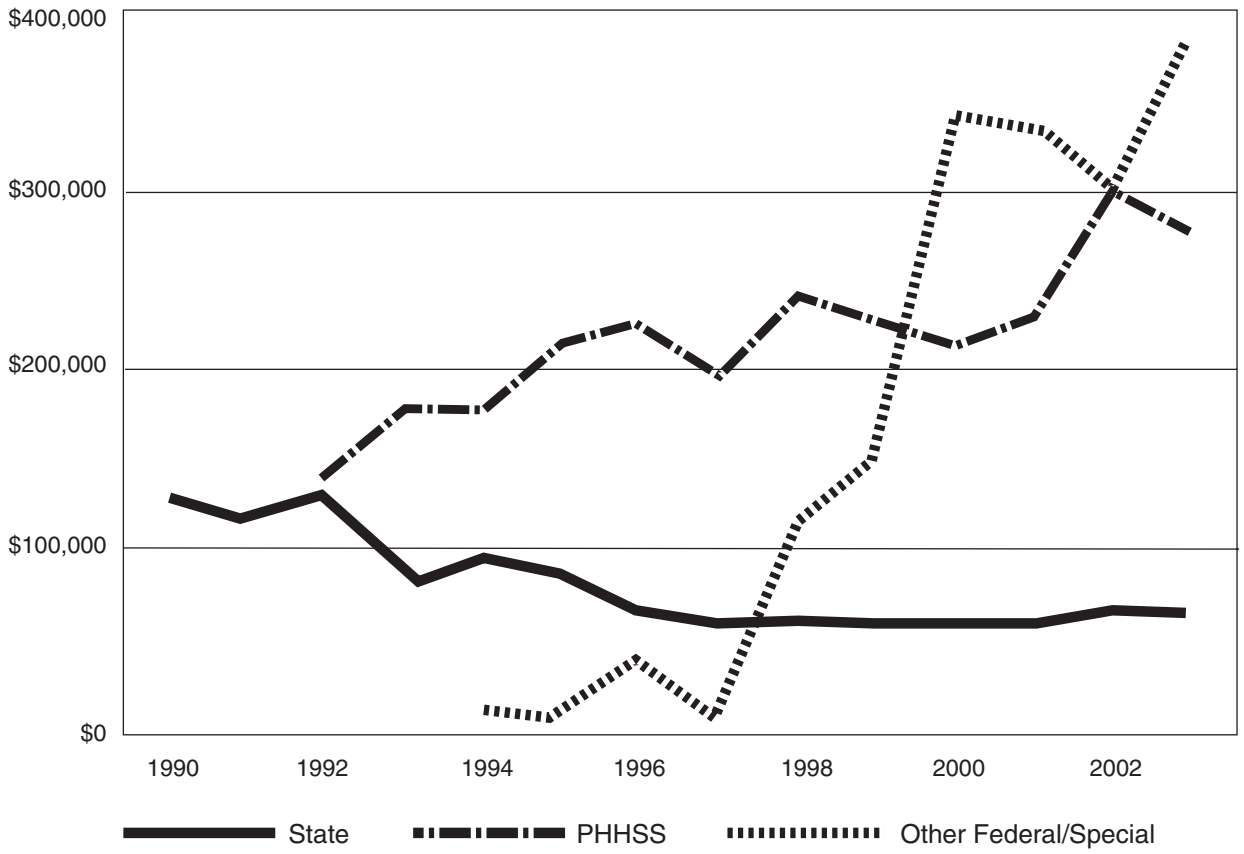
Following the lead of the Injury Prevention Advisory Committee, community coalitions have become a powerful strategy IPCP employs to mobilize and support agencies, businesses, and community organizations in advancing legislation, policy, and educational awareness for the reduction of unintentional and intentional injuries. Coalitions, themselves, are cost-effective in successfully focusing community resources on injury prevention, drawing partners while minimizing duplication of effort, and leveraging the injury program's resources for maximum benefit. IPCP facilitates and supports the state Injury Prevention Advisory Committee, the Keiki Injury Prevention Coalition (KIPC) and KIPC chapters on Kaua'i and Hawai‘i,. These groups form the strong core of an injury prevention network that addresses the spectrum of injuries across all ages. They have played a significant role in bringing about injury prevention successes.

Core Resources

Established in FY 1990 as a state funded program, IPCP began with two FTE (full time equivalent) positions (a manager and a stenographer) and a budget of $131,793. Since that time, IPCP's state general revenue funds have decreased by over 50%. In 1996, the program lost one state funded FTE position, leaving just the IPCP Manager.

Faced with decreasing state funds, IPCP was able to secure federal and other funding that would support specific injury prevention projects. In 1992, federal funds comprised 52% of the budget increasing to 92% in 2003. Today, there are 9.5 grant-funded positions.
Staffing limitations posed by a predominance of grant (vs. state) funds rests in the uncertainty of retaining experienced, fully trained employees who would be able to contribute expertise to a new and growing injury prevention field.

Injury Prevention and Control Program Funding: 1990 – 2003



IPCP's state funding base has declined since its inception in 1990. Since that time, biennium Preventive Health and Health Services Block Grant (PHHSBG) funds have supplemented state funds to support IPCP core functions. Short-term federal and other funding have allowed for program development addressing specific types of injuries, target groups, or capacity building in other sectors. (The latter category includes funding from the National Highway Safety and Transportation Administration, the Centers for Disease Control, the Maternal and Child Health Bureau, and the Healthy Hawai'i Initiative.)

Program Limitations

Although IPCP is charged with providing statewide coordination and collaboration in all areas of injury prevention for all age groups, limited resources determine the actual scope of programs and services provided. Often grant funds support start-up initiatives, but are unable to support continuity to interventions that warrant follow-up activities.

IPCP has focused direct program activity to select injury areas, providing technical assistance and consultation in others. Program attention has been given to: traffic safety (occupant protection, pedestrian and bicycle safety), drowning prevention, playground safety, firearm violence prevention, youth access to alcohol prevention, youth suicide prevention, and school curriculum development.

Leveraging Resources (and maximizing effort)

Based on its role as the focal point for injury prevention efforts in the state and backed by a strong injury prevention network, IPCP has struggled to build its resources by obtaining non-state additional funds and developing volunteers. For biennium fiscal years 2002-2003, the program leveraged its two-year state funding of $135,000 to obtain nearly $800,000 in federal funds and other grants. IPCP also obtained in-kind donations and enlisted an estimated 2,000 volunteer hours to conduct injury prevention activities. Today, the ratio of non-state to state funds is 12:1.

IPCP has helped raise the level of understanding of specific issues related to safety for both the public and the Legislature. Examples include motorcycle helmets, infant car restraints, riding in the back of pick up trucks, etc. As a result, GEICO *has been more hands on involved.*

TIM DAYTON
BRANCH MANAGER
GEICO INSURANCE

Location within the Department of Health

While the initial recommendation of IPAC to the Director of Health was to place IPCP organizationally under a Deputy Director, it was established instead in the Health Promotion and Education Division (HPED) in 1990. The Division was eliminated in 1995 so the program was moved with other HPED programs to the Community Health Division.

The advisory committee then recommended that the health department place IPCP in the Emergency Medical Services System (EMSS) citing it's strong programmatic fit, from pre-hospital prevention to hospital and post-hospital treatment and rehabilitation. It was felt that data linkages between IPCP and EMSS would boost the efforts of both programs. As a result, the program was informally placed under EMSS in 1998 and subsequently, the health department's reorganization in 2001 identified IPCP as a section under the newly titled, Emergency Medical Services and Injury Prevention System (EMSIP).

The overall mission of the EMSIP is "to minimize death, injury, and disability due to life threatening emergency medical care and injury prevention statewide." Within it, IPCP's mission is "to ensure a systems approach to reducing injury morbidity and mortality in Hawai'i." Hawai'i follows the growing number of states that locate their injury prevention programs within their Emergency Medical Services Systems

In an earlier document, **Injury Prevention and Control System**, State of Hawai'i, Department of Health, Health Promotion and Education, June 1988, it is advised: "For the State of Hawai'i to have a system of services for the prevention and control of injuries, several issues must be addressed.

- Injury prevention and control must be given high priority.
- What is already known about the prevention and control of injuries must be applied through a combination of interventions rather than single interventions.
- A single agency must assume the responsibility for the planning and development of the system and for the overall administrative coordination of all activities and services related to injury prevention and control.
- Data related to injuries must be coordinated and collected in a usable format.
- A coordinated system of service delivery must be developed and implemented for emergency medical services, acute care trauma and for rehabilitation."

HPD has reframed it's understanding of its own mission. Whereas the department once thought of itself largely as a crime fighting organization, it now knows that its number one job is saving lives and preventing injuries.

Brandon Stone
Management
Analyst
Honolulu Police
Department

Over the past 13 years, progress has been made in developing an injury prevention system in Hawai'i. Major accomplishments include:

- Hospital discharge data will finally include external cause of injury codes. Injury coding began at the two hospitals which receive the greatest number of injured patients in the state, approximately 25% of the total. These developments will result in a more accurate picture of non-fatal (morbidity) injuries in the state.
- A statewide system of child death review based at the county level has been established. It will provide an extensive review of the circumstances surrounding deaths of children in Hawaii, including those that are injury related.
- Today we have organized coalitions and groups that sustain community awareness of injury prevention by making sure that specific injury issues are on the public agenda.
- A growing network of injury prevention-educated professionals, practitioners and organizations link, collaborate and advocate for injury prevention. One state coalition (KIPC/Safe Kids Hawai'i) now has over 350 members and is recognized as a leading advocate for child safety in Hawai'i. With the largest chapter on O'ahu, active chapters have been organized on the islands of Kaua'i and Hawai'i and collaborative work is ongoing with injury prevention partner organizations on Maui. With IPCP providing the centralized support base and

expertise for injury prevention, individual coalitions provide community support and strengthen community capacity in specific injury areas.

- A growing and diverse number of stakeholders—government agencies, community organizations, businesses—have taken on expanded and proactive roles in injury prevention. Some examples: Police and EMS personnel have become trained car seat instructors and technicians performing car seat checkups; EMS personnel, hospitals and businesses are active in legislative advocacy on injury prevention issues; hospitals are co-sponsors and supporters of KIPC and IPAC ranging from providing meeting facilities to serving as car seat fitting stations; and Department of Education facilities personnel have been trained in playground safety to develop their expertise.

- While IPCP has not grown its own centralized base, the field of injury prevention has sprung up in other systems. Injury prevention coordinator positions have been funded through the state Emergency Medical Services System and now exist in Honolulu, Maui and Kauai counties. In addition, the City and County of Honolulu's Ocean Safety Division has funded and established its own position for injury prevention.

- A competent work force has been developed. IPCP staff and key advisory committee members have been trained in the science and knowledge of injury prevention provided by the Centers for Disease Control and its sponsoring institutes. National speakers and trainers have been brought to Hawai'i to educate and train injury prevention coalitions and the growing network of professionals and practitioners.

There is no doubt that IPAC, IPCP and the injury prevention coalitions face many challenges and opportunities in the years ahead. This paper is a retrospective that attempts to learn from the past in shaping the future.

Since 1989, major strides have been taken to reduce the burden of injury in Hawai'i. The close working relationship shared by IPAC and IPCP over the years has been a prototype for birthing a number of injury prevention coalitions. These coalitions have provided the focused attention needed for making gains in specific injury areas.

The balance of an external advisory body comprised of individuals who represent the best interests of related injury fields such as law enforcement, ocean safety, keiki safety, and ambulance services, has been critical to shaping a broad agenda for the work of IPCP. In turn, IPCP is comprised of staff who have been trained well in the science of injury prevention. They have been able to build and provide expertise to a wide spectrum of individuals and organizations who have joined the injury prevention network. IPCP has set the tone for quality services, from data and information accuracy to program integrity and responsiveness.

Clarifying the major points in this paper provided an opportunity to bring members of IPAC together to consider many aspects in further developing the field of injury prevention in Hawai'i. During these deliberations, the group forged a common understanding of the work ahead.

A vision was created to serve as a beacon toward the future:

A Safe Hawai'i…
from the Mountains to the Sea.

And a new mission statement was drafted and subsequently adopted to better reflect IPAC's focus for the next phase of development.

To build and sustain a sound focal point and base for injury prevention activities in the state and to guide and monitor the development of state and community-based injury and violence prevention initiatives in Hawaii.

Beginning in 2001, the year's dialogue culminated in a one-day retreat in 2002 facilitated by Susan Gallagher, Senior Scientist of the Education Development

Center. Participants deliberated on and discussed the main points of this white paper. At the end of the day, what emerged was a collective resolve toward strategic direction and greater leadership in injury prevention within both IPAC and IPCP. The following steps were therefore recommended:

1. Develop a State Strategic Plan

A mutually agreed upon strategic plan will help IPAC and IPCP in its next phase of development, i.e., to identify and prioritize key areas of injury that may have been inadequately addressed or significantly limited by resources.

2. Strengthen IPAC to be proactive.

IPAC will organize a steering committee to provide core group leadership for the advisory's committee's work in the next three years.

The advisory committee will determine a structure and composition that could best sustain strategic planning and implementation for the field of injury prevention.

Meetings will incorporate strategic planning as an ongoing process and function of the committee.

3. Strengthen and stabilize IPCP as the focal point for a state infrastructure in injury prevention.

To assess the extent to which IPCP meets STIPDA core standards for injury prevention programs, a Centers for Disease Control grant was recently obtained to fund an external team of injury experts to visit Hawai'i for this purpose in 2003.

IPCP must redefine its current staffing in terms of roles and responsibilities and IPCP's relationship with IPAC in implementing its strategic plan.

IPCP must increase collaboration and combine efforts with other DOH programs that have mutual public health interests and outcomes.

IPCP must build its infrastructure and capacity so that it can continue to develop an injury prevention system in the state, further community initiatives and build upon networks it has established over the past 13 years. Numerous partners and coalitions rely on key support provided through the program's collaborative staffing, consultation and technical assistance .

A stable funding base for IPCP's core staff and functions is essential in this key public health arena. At a minimum, State funds must be sought to restore the original budget at its inception 13 years ago.

What must be considered for the next developmental phase of the injury prevention field in Hawai‘i?

Injuries are expected to continue being a major cause of death and disability among Hawai‘i’s people over the next four years, with the leading causes being traffic-related, suicide, drowning, firearm and falls. Now that Hawai‘i is richer in injury data from over a decade ago, more comprehensive strategies may be applied to areas where attention is apparently needed. **The dual roles of IPAC and IPCP are mutually compatible in scrutinizing the data and determining any shift in attention to neglected injury areas or target groups.**

Presently, injury data is available from one centralized source with the capacity to link and analyze data from multiple sources (e.g., Fatal Accident Reporting System, Hospital Discharge, Death Certificates, EMS). While much progress has been made in this area from 13 years ago, more can be done to get injury-specific data disseminated to the public, providers and community groups. Effective use of the data contributes to increased public awareness and better targeting of preventive strategies. **Injury data must be put into a format that can be easily understood by the public.**

It is equally important that IPCP **pursue emerging cross-cutting prevention issues and strategies**. The injury field overlaps with other fields whose knowledge and practice affect injury prevention and treatment. An important challenge in the coming years will be to **facilitate collaboration with those from overlapping and affected fields such as physical fitness, maternal and child health, substance abuse and criminal justice.** Such collaborations would strengthen the mutual objectives of each, and serve the community with a more unified, comprehensive approach.

Certain groups (e.g., violence and suicide prevention, fire safety) have an interest in safety as a shared cause rather than a field of scientific study or professional practice. Over time, they have increasingly recognized their shared interests with the injury field and have adopted its framework, perspectives and methods. One of the challenges in the coming years is to **develop and implement strategies for introducing the injury perspective into the training curricula of the many disciplines that participate and contribute to the injury field.**

In order to fully examine the effectiveness of injury prevention efforts, it is important to be aware of initiatives launched by other disciplines of public health and safety. An **inventory of organizations throughout the state** conducting program activity in injury prevention is needed to truly **assess the various interventions being applied to any specific injury area.**

IPCP focuses on developing both program and community capacity as a critical foundation to support and conduct high quality prevention efforts at state and local levels.

However, IPCP needs to increase and stabilize its state resources and staffing to adequately address injury prevention in all major injury areas through in-depth community assessments and program evaluation. While it is noteworthy that IPCP has maximized its capacity to carry out injury prevention initiatives, its 8:1 proportion of federal to state funds causes great concern that its meager state base is insufficient to sustain its work over time. **It is imperative that state capacity be strengthened through a core of permanent, and therefore, ongoing staffing.** With a more secure state resource base, IPCP can more effectively and less precariously, leverage their resources to secure additional federal funding.

Acknowledgements

The Injury Prevention Advisory Committee (IPAC) would like to thank the Department of Health Injury Prevention and Control Program for the staffing that made this report possible. Special thanks go to Sue Gallagher, Senior Scientist at the Education Development Center in Massachusetts, for sharing a national injury prevention perspective and for her assistance in planning and facilitating the IPAC retreat. Recommendations from the retreat were developed for the "Next Steps" and "Setting a Future Direction for Injury Prevention" sections of the paper.

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This report was funded by a Preventive Health and Health Services Block Grant from the Centers for Disease Control and Prevention (CDC).

We'd like to thank all the individuals who shared their expertise:

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